

REMARKS/ARGUMENTS

The Examiner is thanked for the review of the application, and the telephone interviews of April 28, 2005 and May 5, 2005.

Claims 1-20 remain in this application. Independent Claims 1, 8 and 15 have been amended.

In the Office Action dated February 9, 2005, the Examiner rejected Claims 1-8 and 15-20 under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The Examiner stated that "The basis of this rejection is set forth in a two-prong test of: (1) whether the invention is within the technological arts; and (2) whether the invention produces a useful, concrete, and tangible result."

The Examiner also stated that "Claims 1-8 and 15-20 appear to be describing a method that is attempting to sell a price management technique, whereas a group of stores are grouped based on current store/pricing information. Thus, this process does not include a distinguishable apparatus, computer implementation, or any other incorporated technology, and would appear to be an attempt to patent an abstract idea not a 'tangible' process and, therefore, non-statutory subject matter. As to technological arts recited in the preamble, mere recitation of the preamble (i.e., intended or field of use) or mere implication of employing a machine or article of manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble. Mere intended or nominal use of a component, albeit within the technological arts, does not confer statutory subject matter to an otherwise abstract idea if the component does not apply, involve, use, or advance the underlying process."

Independent Claims 1 and 15 have been amended to recite a "computer-implement method" and are both now in compliance with 35 U.S.C. 101 and in allowable form. Claims 2-8 and 16-20 depend on Claims 1 and 15, respectively, and are all also in allowable form.

In the same Office Action, the Examiner has rejected Claims 1-20 under 35 U.S.C. 103 (a) as being unpatentable over Gymboree ('Gymboree Enhances Price Management,' Retail Systems Alert, Vol. 13, No. 6, June 2000).

Regarding Independent Claims 1 and 8, the Examiner has stated that "Gymboree discloses a method (apparatus) for forming a plurality of stores into a plurality of clusters, comprising: collecting a store specific information; providing optimized combinations for each individual store based on the store specific information ('Gymboree Enhances Price Management,' Retail Systems Alert, Volume 13, Number 6, June 2000). Gymboree fails to expressly disclose, 'creating a plurality of clusters based on the closeness of the optimal combinations.' However, Gymboree does disclose using store specific information to 'analyze cluster pricing and the potential leveraging of optimization data for its store allocation process.' ('Gymboree Enhances Price Management,' Retail Systems Alert, Volume 13, Number 6, June 2000). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included creating a plurality of clusters based on the closeness of the optimal combinations, as the same information is collected and analyzed by the system/method disclosed by Gymboree, and would be simply integrated into any price management system."

In accordance with the Applicants' invention, an "optimization engine 212 utilizes the demand coefficients 228 to create a demand equation. The optimization engine is able to forecast demand and cost for a set of prices and promotion conditions, such as displays and ads to calculate net profit. The stores 224 may use the support tool 216 to provide optimization rules to the optimization engine 212 (step 328). The optimization engine 212 may use the demand equation, the variable and fixed costs, and the rules to compute an optimal set of prices that meets the rules (step 332). For example, if a rule specifies the maximization of profit, the optimization engine would find a set of prices that causes the largest difference between the total sales revenue and the total cost of all products being measured. In this preferred embodiment, the prices are provided on a store-by-store basis, instead of by groups of stores. In addition, in this example the prices are also provided on an item-by-item basis" (emphasis added) (see page 7, lines 7-19 of the specification, and also Figure 3).

In contrast, the Examiner's cited reference Gymboree appears to teach an optimization model that analyzes sales and markdown patterns on leftover items. Gymboree also discusses examining inventory discrepancies by store to improve the store allocation process and to reduce

inventory. Gymboree attempts to solve the problem of “required markdowns on all leftover items every time a new assortment” of new collections arrive in their fashion-driven business by better allocation of the markdown items among the Gymboree stores.

Gymboree does not teach nor suggest “optimizing prices for a plurality of products for at least one of the plurality of clusters” (emphasis added) as recited by independent Claims 1 and 8. Instead Gymboree optimizes store allocation of already marked-down items while the Applicants’ invention optimizes prices for at least one cluster of stores. In addition, Gymboree does not teach nor suggest price optimization using “demand coefficients, cost coefficients and optimization rules” as recited by amended Claims 1 and 8. Hence, Claims 1 and 8 are clearly allowable over Gymboree.

Regarding Claims 2 and 9, the Examiner has stated that “Gymboree discloses providing cluster based combinations.” Regarding Claims 3 and 10, the Examiner has stated that “Gymboree discloses wherein the store specific information is selected from a group comprising point-of-sales data, customer survey data, and cost data.” Regarding Claims 4 and 11, the Examiner has stated that “Gymboree discloses wherein the combinations are selected from a group comprising item and price, assortment, and promotion combinations.”

Regarding Claims 5 and 12, the Examiner has stated that “Gymboree discloses wherein creating the plurality of clusters, comprises: providing at least one constraint; and placing stores that meet the constraints and with the closest optimal combinations in the same cluster of the plurality of clusters (common practice in cluster pricing/price management).”

Regarding Claims 6 and 13, the Examiner has stated that “Gymboree discloses wherein the at least one constraint places two stores in the same cluster, by making each store of the two stores have the same optimal combination (common practice in the cluster pricing/price management).” Regarding Claims 7 and 14, the Examiner has stated that “Gymboree discloses wherein the at least one constraint specifies a maximum number of clusters (common practice in cluster pricing/price management).”

Claims 2-7 and 9-14 are dependent on base Claims 1 and 8, respectively, and are also allowable over Gymboree for at least the same reasons discussed above for Claims 1 and 8.

As for independent Claim 15, the Examiner stated “Gymboree discloses a method for forming a plurality of stores into a plurality of clusters, comprising: performing an optimization for the plurality of stores to obtain individual stores prices; and performing an optimization for the plurality of clusters to obtain cluster prices (‘Gymboree Enhances Price Management,’ Retail Systems Alert, Volume 13, Number 6, June 2000). Gymboree fails to expressly disclose, ‘using the individual store prices to create the plurality of clusters.’ However, Gymboree does disclose using store specific information to ‘analyze cluster pricing and the potential leveraging of optimization data for its store allocation process.’ (‘Gymboree Enhances Price Management,’ Retail Systems Alert, Volume 13, Number 6, June 2000). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included using the individual store prices to create the plurality of clusters, as the same information is collected and analyzed by the system/method disclosed by Gymboree, and would be simply integrated into any price management system.”

Amended Claim 15 also recites “optimizing prices for a plurality of products for at least one of the plurality of clusters, and wherein the optimizing of prices uses demand coefficients, cost coefficients and optimization rules”, and hence is allowable over Gymboree for the same reasons discussed above for Claims 1 and 8.

Regarding Claim 16, the Examiner has stated that “Gymboree discloses wherein the performing the optimization for the plurality of stores comprises: collecting point-of sales data; modeling the point of sales data; and providing an optimization based on the modeled point of sales data.” Regarding Claim 17, the Examiner has stated that “Gymboree discloses wherein the using the individual store prices to create the plurality of clusters, comprises: providing at least on[e] constraint; and placing stores that meet the constraints and with the closest individual store prices in the same cluster of the plurality of clusters (common practice in cluster pricing/price management).”

Regarding Claim 18, the Examiner has stated that “Gymboree discloses wherein the at least one constraint prohibits two stores of the plurality of stores from being in the same cluster (common practice in cluster pricing/price management).” Regarding Claim 19, the Examiner has stated that “Gymboree discloses wherein the at least one constraint places two stores in the same cluster, by averaging the prices of an item and placing the average price as the price of the item in each store (common practice in cluster pricing/price management).” Regarding Claim 20, the

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Examiner has stated that "Gymboree discloses wherein the at least one constraint places stores with geographical closeness in the same cluster (common practice in cluster pricing/price management)."

Because Claims 16-20 depend on base Claim 15, Claims 16-20 are allowable for at least the same reasons base Claim 15 is allowable, as discussed above for Claims 1 and 8.

In sum, base Claims 1, 8 and 15 have been amended and are now allowable. Claims 2-7, 9-14 and 16-20 which are dependent on Claims 1, 8 and 15, respectively, are all allowable for at least the same reasons the independent Claims are allowable. Hence, Examiner's rejection of all the dependent Claims are rendered moot in view of the amendment to the respective independent Claims.

Applicants believe that all pending Claims 1-20 are now allowable over the cited art and are also in allowable form and respectfully request a Notice of Allowance for this application from the Examiner. The commissioner is authorized to charge any fees that may be due to our Deposit Account No. 50-2766 (Order No. DEM1P010). Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at telephone number 925-570-8198.

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Respectfully submitted,



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